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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,315	05/21/2001	Joon Young Yoon	0255-0004	6558

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EXAMINER
TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
1771	5

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/856,315	YOON ET AL.	
	Examiner	Art Unit	
	Norca L. Torres-Velazquez	1771	

-- The MAILING DATE of this c mmunication appears on the c ver sheet with the correspond nce address --

Period f r R ply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) *7 and 8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose how the warp knit fabric structure is constructed to have a front surface layer that consists of ultra fine yarn with monofilament with a denier of 0.01-0.9, and a rear surface layer that consists of synthetic yarn or high shrinkage yarn with monofilament with a denier of 1-5. The specification lacks adequate disclosure of the two-layer structure, for purposes of examination these claims will be interpreted, as a warp knit that comprises ultra fine yarn, synthetic, or high shrinkage yarns in any structural combination. Claims 2-6 are further rejected for their dependency on claim 1.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6 are rejected for the phrase "...having excellent touch, characterized in that; consist of..." First, the phrase "excellent touch" is a relative term, which renders these claims

indefinite. The term "excellent touch" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. Second, the term "characterized in that" is an open-ended transitional phrase that is followed by the closed-ended phrase "consist of". It is not clear whether the claimed warp knit is precluded from the inclusion of elements other than a front surface and a rear surface, or if by using the "characterized in that", the Applicant recognizes that the warp knit is not only limited to the claimed organizational elements. For examining purposes, the Examiner interprets the claim as being open-ended and that it is not only limited to the claimed organizational elements.

Claims 1 is indefinite because it is not clear how the two-layer construction is achieved with a warp knit. Does the Applicant intend to make a knit with a two bar knitting machine or does the warp knit merely comprises different types of yarns?

Further, it is not clear if the Applicant is claiming a "synthetic yarn" or a "high shrinkage yarn", because all "synthetic yarns" are not necessarily "high shrinkage yarns". With regards to claims 1, 4 and 5, it is further noted that the term "high shrinkage" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SCHOLZ et al. (US 5,512,354).

SCHOLZ et al. discloses a knit fabric construction comprising a nonfiberglass micro denier yarn in combination with a heat shrinkable yarn or a stretch yarn, and alternatively a stiffness controlling yarn (Abstract). The fabric construction is suitable for use in orthopedic applications such as casting materials. (Column 2, lines 63-65). The reference further teaches that the nonfiberglass micro denier yarns are formed from fibers or filaments having a diameter of no greater than 1.0 denier. (Column 7, lines 1-10). Suitable micro denier yarns staple fibers and filaments of polyester, polyamide, polyolefin or rayon. (Column 7, line s15-20) SCHOLZ et al. further teaches that micro denier yarns maybe e made using a combination of the above aforementioned filament materials. (Column 7, lines 39-43) The reference also teaches the use of highly texturized, heat shrinkable, extensible, thermoplastic yarns in the wale direction to provide the fabric with sufficient stretch without creating a high elastic rebound force. (Column 8, lines 50-68) The SCHOLZ et al. reference teaches a knit having a polyester heat shrinkable yarn ranging from 30-70 weight percent in the front bar and a polyester micro-denier fiber ranging from 30-70 weight percent in the back bar (Column 16, lines 5-10). It further teaches that the heat shrinkable yarn can be made of fibers and filaments of up to about 6 denier. Preferably, the heat shrinkable yarns are made of polyester, polyamide, and polyacrylonitrile fibers or filaments. (Column 9, lines 41-46) The stiffness controlling yarn can be a multi-filament or mono-filament of polyester, polyamide such as nylon or polyolefin. (Column 11, lines 6-36)

Although the reference does not explicitly teach the claimed recovery rate, it is reasonable to presume that said recovery rate property is inherent to the invention of SCHOLZ et al. Support for said presumption is found in the use of like materials (i.e., polyester heat shrinkable yarns and micro-denier yarns staple fibers and filaments of polyester, polyamide, polyolefin or rayon). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed recovery rate property would obviously have been present once the SCHOLZ et al. product is provided. *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977)

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOLZ et al. (US 5,512,354).

SCHOLZ et al. does not specifically teach co-polyester high shrinkage yarn, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use known co-polyester high shrinkage yarns. It has been held to be within the general skill of one of ordinary skill in the art to select a known material on the basis of suitability for the intended use. *In re Leshin*, 125 USPQ 416.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 2, 3, 5 and 6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 6 and 7 of copending Application No. 09/856,314. Although the conflicting claims are not identical, they are not patentably distinct from each other because the warp knit of the present application is not precluded from having an intermediate layer as in the copending Application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 8:30-4:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nlt
April 28, 2003

ELIZABETH M. COLE
PRIMARY EXAMINER